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Letter: long-term abdominal drains in refractory ascites - evolving concept of palliative care in decompensated cirrhosis. Authors' reply

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We thank Dr Roy and colleagues for their interest and comments (1).

We had inadvertently classified one patient as having Child A disease when in fact their Child Pugh Score was 7 (2). We appreciate this being brought to our attention.

Global tests of clot formation, such as rotational thromboelastometry and thromboelastography may eventually have a role in the routine assessment of clotting in patients with cirrhosis, thereby optimising use of blood products (3). They however remain without well-defined parameters in such patients, thus requiring subjective interpretation of complex data (3). Such expertise may not always be available in non-teaching hospitals.

Our study cannot be compared with Chan et al's (4) as overall, < 20% of their cohort had cirrhosis. More importantly, they used non-tunnelled drains, which are associated with higher infection risk compared with tunnelled drains (peritonitis 4.4% vs. 21%) (5). All patients in the REDUCe study received prophylactic antibiotics for the study duration. Incidence of self-limiting cellulitis/leakage, as already reported was 41% (7/17) in the long-term abdominal drain (LTAD) vs. 11% (2/19) in the large volume paracentesis (LVP) group. Our peritonitis incidence observed after primary prophylaxis (LTAD vs. LVP group, 6% (1/17) vs. 11% (2/19)) is comparable with other studies in cirrhosis (6).

It must be emphasised that the REDUCe study was not powered to detect differences between groups. Nonetheless, as already reported, serum creatinine remained stable: baseline and week 12-serum creatinine (μmol/L) (median, IQR), LTAD vs. LVP group being 109 (79, 141) vs. 113.5(89, 134) and 104.5 (81, 115.5) vs. 127 (63, 158) respectively (2).

Recent trials addressing long-term administration of human albumin solution (HAS) in patients with cirrhosis and ascites have given conflicting results (7-8). Reasons may include baseline severity of liver disease, follow-up duration and total amount of HAS administered

(9). The ANSWER study (7) excluded patients with refractory ascites but in the MACHT trial (8), use of HAS and midodrine was not associated with significant improvements in control of ascites, need for LVP and health-related quality of life. In patients with palliative disease, focus should be symptom management, providing support in the preferred place of care (often in the community) as well as avoiding unnecessary hospitalisation. Therefore at present HAS cannot be routinely recommended as part of palliative management of patients with refractory ascites due to cirrhosis.

Designing palliative intervention trials raise complex issues (10) and usual outcomes such as mortality may not be appropriate. Since infection remains the main deterrent to the use of palliative LTADs in cirrhosis, in our opinion, any future definitive study should be designed as a non-inferiority trial for peritonitis incidence.

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